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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,644

01/12/2006

Stefan Oliver Czerner

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EXAMINER

HEINRICH, SAMUEL M

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/556,644	<b>Applicant(s)</b> CZERNER ET AL.	
	<b>Examiner</b> Samuel M. Heinrich	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn.

AAPA describes ([0002]-[0004]) well known preheating prior to hardfacing.

JP358106836A describes use of a plurality of laser light sources wherein one source is used for preheat and a second different laser is used for heating or fusing.

Plankenhorn describes (column 1, lines 11-20) well known lasers used for "hardening and annealing operations".

The instant claimed process would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because preheat and hardfacing is well known, and simultaneous use of both preheat and heating beams is known and provides rapid processing.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 4,857,699 to Duley et al and in view of JP363149092A.

Duley et al describe (Abstract) laser processing and laser preprocessing.

JP363149092A describes opposite side processing.

The use of preprocessing and processing from opposite sides would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to rapidly process multiple workpieces.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 5,080,474 to Miyamoto.

Miyamoto describes (column 1, lines 18-28) well known adjustment of the incident angle of a laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide uniform energy distribution.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn in view of USPN 4,857,699 to Duley et al and in view of JP363149092A as applied to claim 14 above, and further in view of USPN 5,080,474 to Miyamoto.

Miyamoto describes (column 1, lines 18-28) well known adjustment of the incident angle of a laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide uniform energy distribution.

Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of DE4234339A1.

DE4234339A1 describes well known adjustment of power subsequent to measurement of a temperature and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to improve production quality.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn in view of USPN 4,857,699 to Duley et al and in view of JP363149092A as applied to claim 14 above, and further in view of DE4234339A1.

DE4234339A1 describes well known adjustment of power subsequent to measurement of a temperature and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to improve production quality.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 6,883,405 to Strauch.

Strauch describe (column 4, line 66) well known use of a diode laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide suitable energy for heat treatment of a particular size workpiece.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 5,493,445 to Sexton et al.

Sexton et al describe (column 6, lines 45-47) well known "subsequent processing" and the use thereof following a laser machining process such as heat treatment would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides finishing for the workpiece.

***Response to Arguments***

Applicant's arguments with respect to claims 11-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Samuel M Heinrich/  
Primary Examiner, Art Unit 3742